

539,184

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
8 July 2004 (08.07.2004)

PCT

(10) International Publication Number  
**WO 2004/056696 A1**

(51) International Patent Classification<sup>7</sup>: **B67D 3/00**, 1/08

(21) International Application Number:  
**PCT/GB2003/005586**

(22) International Filing Date:  
19 December 2003 (19.12.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
**0229752.1 23 December 2002 (23.12.2002) GB**

(71) Applicant (for all designated States except US): **EBAC LIMITED [GB/GB]**; St Helen Trading Estate, Bishop Auckland, Durham DL14 9AL (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **WALTON, Philip, Andrew [GB/GB]**; Ebac Limited, St Helen Trading Estate,

Bishop Auckland, Durham DL14 9AL (GB). **PITTAWAY, Clyde [GB/GB]**; Ebac Limited, St Helen Trading Estate, Bishop Auckland, Durham DL14 9AL (GB). **SQUIRE, Gary [GB/GB]**; Ebac Limited, St Helen Trading Estate, Bishop Auckland, Durham DL14 9AL (GB).

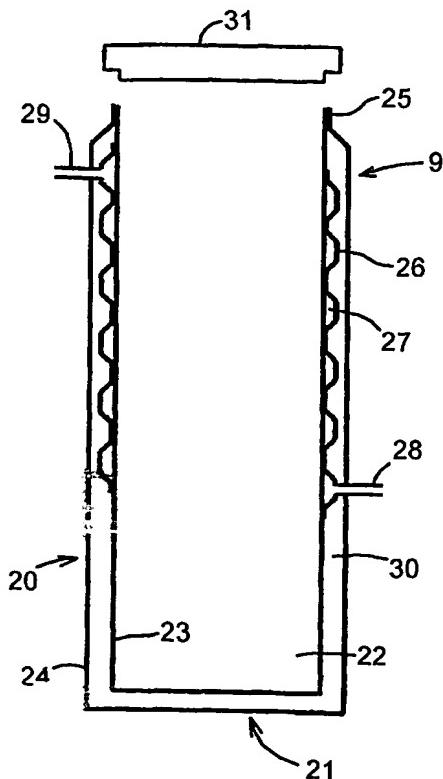
(74) Agent: **CRASKE, Stephen, Allan; Craske & Co., Patent Law Chambers, 15 Queens Terrace, Exeter, Devon EX4 4HJ (GB)**.

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),

[Continued on next page]

(54) Title: RESERVOIRS FOR BOTTLED LIQUID DISPENSERS



(57) Abstract: A thermally-insulated reservoir (9) for a dispenser in which liquid is supplied from a bottle to a discharge outlet via a reservoir, has an inner wall (23) and an outer wall (24) defining a sealed and evacuated heat-insulating cavity (30) at least partially surrounding a liquid space (22). In one application of the invention the reservoir takes the form of a cooling vessel with the thermal means provided by a cooling coil (26). The invention may also be applied to reservoirs which form a hot tank with the thermal means provided by an electrical heating element.

WO 2004/056696 A1



Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

**Published:**

— *with international search report*